# UNITED STATES PATENT AND TRADEMARK OFFICE

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/048,026 | 03/26/1998 | KANJI UCHINO | 826.1482/JDH | 3866 |

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| EXAMINER |
|---|
| PAULA, CESAR B |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2178 | 27 |

DATE MAILED: 10/27/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

| **Office Action Summary** | Application No. | Applicant(s) |
|---|---|---|
| | 09/048,026 | UCHINO ET AL. |
| | Examiner | Art Unit |
| | CESAR B PAULA | 2178 |

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *28 July 2003* .

2a)☒ This action is **FINAL**.          2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1,2,8-10,16 and 17* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,8-10,16 and 17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All  b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____ .

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

    a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .

4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: .

# DETAILED ACTION

1.      This action is responsive to the amendment filed on 7/28/2003.

**This action is made Final.**

2.      In the amendment, claims 3-7, 11-15, 18-31 have been canceled. Claims 1-2, 8-10, and

16-17 are pending in the case.  Claims 1, 8-9, and 16-17 are independent claims.

## *Priority*

3.      Acknowledgment is made of applicant's claim for foreign priority under 35

U.S.C. 119(a)-(d), and based on application # 09-242247 filed in Japan on 9/8/1997, which

papers have been placed of record in the file.

## *Drawings*

4.      This application has been filed with informal drawings which are acceptable for

examination purposes only.  Formal drawings will be required when the application is allowed.

## *Claim Rejections - 35 USC § 103*

5.      The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section
> 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the
> subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill
> in the art to which said subject matter pertains.  Patentability shall not be negatived by the manner in which the
> invention was made.

6.      Claims 1-2, 8-10, and 16-17 remain rejected under 35 U.S.C. 103(a) as being

unpatentable over Nolan (Pat. # 5,933,599, 8/3/1999, filed on 7/17/1995), in view of Knowles et

al, hereinafter Knowles (Pat. # 5,905,863, 5/18/1999, filed on 5/30/1997), and further in view of

Bailey et al, hereinafter Bailey (Pat. # 5,845,084, 11/10/1998, filed on 5/1/1996).


        Regarding independent claim 1, Nolan discloses the display of a group of bulletin board

documents where the documents contributed earlier are referenced to by documents published

later (fig. 9-10, and col.2, lines 30-67). Nolan fails to explicitly disclose *determining for each*

*document in the set, which of the documents is referenced, and extract keywords contained in a*

*body of a document forming part of each group of documents based on a statistical analysis by*

*referring to document group information.* Knowles teaches the organization of bulletin board

messages using various type of information, such as the subject matter of the messages,

similarity of vocabulary found in the body of related messages (such as similar text contained in

the body of the messages) using statistical information retrieval techniques, etc. (c.1, L.63-

c.2,L.67, col.3, lines 20-64, and col. 4, lines 34-50). It would have been obvious to a person of

ordinary skill in the art at the time of the invention to have combined the teachings of Nolan, and

Knowles, because Knowles teaches the "filtering of messages to achieve a significant level of

accuracy at identifying when one message is a reply to another" (col. 3, lines 60-64), such as

sorting the messages found in the bulletin board disclosed by Nolan, so as to have a high degree

of similarity, thereby producing a better classified bulleting board.

        Furthermore, Nolan the extraction and display of the subject—title keywords-- of email

documents posted in a bulletin board directory (col. 2, lines 30-67, and fig.9-10). Nolan fails to

explicitly disclose *extract keywords contained in the body of a document, and display keywords extracted from the document corresponding to the title...the title and the keywords displayed in areas related to each other.* Bailey teaches a preview pane for displaying a message's extracted keywords along with the title of the message (col. 2, lines 44-67, and FIG. 3). It would have been obvious to a person of ordinary skill in the art at the time of the invention to have combined the teachings of Nolan, Knowles, and Bailey, and display a pane with keywords of the quoted text found in related messages, because Bailey teaches above the benefit of previewing of messages without having to open them in a separate window.

Claim 2 is directed towards an apparatus for displaying a group of documents as recited in the rejection of claim 1, and is therefore rejected on the same basis.

Regarding independent claim 8, Nolan discloses the display of a group of bulletin board documents where the documents contributed earlier are referenced to by documents published later (fig. 9-10, and col.2, lines 30-67)--*a document group analysis device to classify a plurality of documents forming a set of documents into at least one group of cross-referenced documents ........* Nolan fails to explicitly disclose *determining for each document in the set, which of the documents is referenced.* Knowles teaches the organization of bulletin board messages using various type of information, such as the subject matter of the messages (c.1, L.63-c.2,L.67). It would have been obvious to a person of ordinary skill in the art at the time of the invention to have combined the teachings of Nolan, and Knowles, because Knowles teaches the "filtering of messages to achieve a significant level of accuracy at identifying when one message is a reply to

another" (col. 3, lines 60-64), such as sorting the messages found in a bulletin board the type

disclosed by Nolan.

Moreover, Nolan discloses the display of a group of bulletin board documents where the

documents contributed earlier are referenced to by documents published later (fig. 9-10, and

col.2, lines 30-67). Nolan fails to explicitly disclose *a topic analysis device to further classify*

*each group of cross-referenced documents based on topics extracted from each document, and a*

*topic keyword extraction device*. Knowles teaches "the filtered potential parent messages....are

then passed along...The child, or reply, message...is also processed" (c.1, L.63-c.2,L.67, c. 7, L.

56-67, and c. 8, L.1-67). It would have been obvious to a person of ordinary skill in the art at the

time of the invention to have combined the teachings of Nolan, and Knowles, because Knowles

teaches the "filtering of messages to achieve a significant level of accuracy at identifying when

one message is a reply to another" (col. 3, lines 60-64).

Moreover, Nolan fails to explicitly teach *a topic keyword extraction device to extract*

*keywords contained in a body of each document relevant to each topic obtained by the further*

*classification of each of the groups of documents based on a statistical analysis by referring to*

*document group information, and topic classification information*. Knowles teaches the

organization of bulletin board messages using various type of information, such as the subject

matter of the messages—*document group information*, text in the messages (quoted,

unquoted)—*topic classification information*, similarity of vocabulary found in the body of

related messages (such as similar text—*keywords*-- contained in the body of the messages) using

statistical information retrieval techniques, etc. (c.1, L.63-c.2,L.67, col.3, lines 20-64, col. 4,

lines 34-50, and col.7, lines 42-col.8, lines 1-67). It would have been obvious to a person of

ordinary skill in the art at the time of the invention to have combined the teachings of Nolan, and

Knowles, because Knowles teaches the "filtering of messages to achieve a significant level of

accuracy at identifying when one message is a reply to another" (col. 3, lines 60-64), such as

sorting the messages found in the bulletin board disclosed by Nolan, so as to have a high degree

of similarity, thereby producing a better classified bulleting board.

Furthermore, Nolan teaches the display of "bulletin board navigator" (col. 11, lines 43-

67, and FIG. 9)--*a topic keyword display device for displaying ... ...a relevant title.* Nolan fails to

explicitly disclose *display the keywords extracted from the body of each document*

*corresponding to the title...the title and the keywords displayed in areas related to each other.*

Bailey teaches a preview pane for displaying a message's extracted keywords along with the title

of the message (col. 2, lines 44-67, and FIG. 3). It would have been obvious to a person of

ordinary skill in the art at the time of the invention to have combined the teachings of Nolan,

Knowles, and Bailey, and display a pane with keywords of the quoted text found in related

messages, because Bailey teaches above the benefit of previewing of messages without having to

open them in a separate window.


Claims 9-10, 16-17 are directed towards a relevant document display method for

implementing the apparatus found in claim 1-2, 8, and 1 respectively, and therefore are similarly

rejected.

## *Response to Arguments*

7.      Applicant's arguments filed 7/28/2003 have been fully considered but they are not

persuasive. The Applicants remark that Bailey does not have any discussion regarding the

extracting of keywords from the body of the message (page 7, lines 25-26). The Applicants are

directed towards the rejection of the amended claims as outlined above, which addresses the

newly introduced limitation of extracting keywords from the body of a document using a

statistical analysis.


Regarding claims 1-2, the Applicants states that Bailey does not teach or suggest the

extracting of keywords from the body of the message based on a statistical analysis by referring

to the document group information (page 8, lines 7-23). The Applicants are directed towards the

rejection of the amended claims as outlined above, which addresses the newly introduced

limitation of extracting keywords from the body of a document using a statistical analysis.


Regarding claim 8, the Applicants states that Bailey does not teach or suggest the

extracting of keywords from the body of each document relevant to each topic obtained by the

further classification of each of the groups of documents based on a statistical analysis by

referring to the document group information, and the topic classification information (page 8,

lines 24-31). The Applicants are directed towards the rejection of the amended claims as

outlined above, which addresses the newly introduced limitation of extracting keywords from the

body of a document using a statistical analysis.

Regarding claims 9-10, the Applicants submit that Bailey does not teach or suggest the extracting of keywords from the body of a document, which forms part of each group of documents based on a statistical analysis by referring to the document group information (page 8, lines 32-page 9, line 6). The Applicants are directed towards the rejection of the amended claims as outlined above, which addresses the newly introduced limitation of extracting keywords from the body of a document using a statistical analysis.

Regarding claim 16, the Applicants states that the prior art does not teach or suggest the extracting of keywords contained in a body of each document relevant to each topic obtained by the further classification of each group of cross-referenced documents based on a statistical analysis by referring to the document group information, and the topic classification information (page 9, lines 7-13). The Applicants are directed towards the rejection of the amended claims as outlined above, which addresses the newly introduced limitation of extracting keywords from the body of a document using a statistical analysis.

Regarding claim 17, the Applicants states that the prior art does not teach or suggest the extracting of keywords contained in a body of a document forming part of each group of documents based on a statistical analysis by referring to the document group information (page 9, lines 14-19). The Applicants are directed towards the rejection of the amended claims as outlined above, which addresses the newly introduced limitation of extracting keywords from the body of a document using a statistical analysis.

*Conclusion*

8.  **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing

date of this final action.

I.     The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure. Lang et al (Pat. # 5,867,799), and Sanu et al (Pat. # 5,974,409).

II.     Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Cesar B. Paula whose telephone number is (703) 306-5543. The

examiner can normally be reached on Monday through Friday from 8:00 a.m. to 4:00 p.m.

(EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor,

Heather Herndon, can be reached on (703) 308-5186. However, in such a case, please allow at

least one business day.

Any inquiry of a general nature or relating to the status of this application or proceeding should

be directed to the Group receptionist whose telephone number is (703) 305-3900.

Any response to this Action should be mailed to:

> Director United States Patent and Trademark Office
>
> Washington, D.C. 20231

Or faxed to:

- **(703) 746-7238**, (for **After Final** communications intended for entry)

- **(703) 746-7239**, (for **Formal** communications intended for entry, **except formal After Final**

  **communications**)

  Or:

- **(703) 746-7240**, (for **Informal or Draft** communications for discussion only, please label

  "**PROPOSED**" or "**DRAFT**" ).

**Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,**
**Arlington, VA, Sixth Floor (Receptionist).**

*CBP*

10/8/03

STEPHEN S. HONG
PRIMARY EXAMINER